

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (currently amended): A stage unit comprising:

a first stage which moves two dimensionally with a substrate holding member holding a substrate mounted, and a second stage which is provided separately from said first stage;

at least a first fiducial mark provided on each of said first stage and said second stage and a second fiducial mark provided on each of said first stage and said second stage ~~for use in a predetermined measurement sequence~~, said first fiducial mark and said second fiducial mark both used in ~~[[said]]~~ a predetermined measurement sequence; and

first and second fiducial mark plates, wherein said first fiducial mark is provided on said first fiducial mark plate on both of said first and ~~[[said]]~~ second stages, and said second fiducial mark is provided on said second fiducial mark plate on both of said first and second stages, a position of said second fiducial mark plate being different from a position of said first fiducial mark plate on the respective stages.

Claim 2 (previously presented): The stage unit according to Claim 1, comprising at least a third fiducial mark, wherein said at least first, second, and third fiducial marks are respectively arranged in the vicinity of each vertex position of a polygon which contains a center of said substrate holding member.

Claim 3 (previously presented): The stage unit according to Claim 1, wherein said first and second fiducial marks are arranged on a straight line passing through a center of said substrate holding member on opposite sides with respect to said center.

Claim 4 (canceled)

Claim 5 (currently amended): An exposure apparatus which exposes a substrate with an energy beam and forms a predetermined pattern on said substrate, said exposure apparatus comprising:

a first stage which moves two-dimensionally with a substrate holding member holding said substrate mounted, and a second stage which is provided separately from said first stage;

a first fiducial mark arranged on each of said first stage and said second stage and a second fiducial mark ~~which are~~ arranged on each of said first stage and said second stage, ~~and are~~ said first fiducial mark and said second fiducial mark both used in a predetermined measurement sequence;

a mark detection system which detects marks located on at least one of said first and second stages;

a control unit which performs said predetermined measurement sequence including detection of said first and second fiducial marks using said mark detection system; and

first and second fiducial mark plates, wherein said first fiducial mark and said second fiducial mark are both used in said predetermined measurement sequence, said first fiducial mark is arranged on said first fiducial mark plate on both of said first and [[said]] second stages, and said second fiducial mark is arranged on said second fiducial mark plate on both of said first and [[said]] second stages, a position of said second fiducial mark plate being different from a position of said first fiducial mark plate on the respective stages.

Claims 6-8 (canceled)

Claim 9 (original): An exposure apparatus which exposes a substrate with an energy beam and forms a predetermined pattern on said substrate, said exposure apparatus comprising:

- a substrate stage that moves two-dimensionally;
- a position measurement unit that measures a position of said substrate stage;
- a substrate holding member mounted on said substrate stage that holds said substrate;
- at least three fiducial marks that are respectively arranged in the vicinity of each vertex position of a polygon that contains a center of said substrate holding member, and are arranged on said substrate stage with a positional relationship between each of said fiducial marks and said substrate holding member constant;
- a mark detection system which detects marks located on said substrate stage including said fiducial marks; and
- a control unit that performs various types of measurement sequences respectively including a detection operation to detect either of one and a plurality of said at least three fiducial marks using said mark detection system and said position measurement unit.

Claim 10 (original): The exposure apparatus according to Claim 9, said exposure apparatus further comprising:

- a plurality of fiducial mark plates on which at least one of said fiducial marks is respectively formed, said fiducial mark plates arranged on a periphery of said substrate holding member on said substrate stage.

Claim 11 (original): The exposure apparatus according to Claim 10, wherein said at least three fiducial marks are arranged on said plurality of fiducial mark plates, dispersed by each measurement sequence which uses at least one of said fiducial marks.

Claim 12 (original): The exposure apparatus according to Claim 11, wherein a position of said substrate stage is controlled with said position measurement unit based on an orthogonal coordinate system, and

said plurality of fiducial mark plates include

a first mark plate on which a plurality of fiducial marks are arranged along a first axis direction of said orthogonal axis, said first mark plate narrowly extending in said first axis direction, and

a second mark plate on which a plurality of fiducial marks are arranged along a second axis direction orthogonal to said first axis, said second mark plate narrowly extending in said second axis direction.

Claim 13 (original): The exposure apparatus according to Claim 9, wherein said at least three fiducial marks are respectively formed on said substrate holding member.

Claims 14-19 (canceled)

Claim 20 (previously presented): The exposure apparatus according to Claim 5, wherein said mark detection system includes:

a first detection unit which detects said first and second fiducial marks on said first stage; and

Application No. 09/995,595
Reply to Notice of Allowance dated March 22, 2004
AMENDMENT UNDER 37 C.F.R. §1.312

a second detection unit which detects said first and second fiducial marks on
said second stage.

Claim 21 (previously presented): The exposure apparatus according to Claim 20,
wherein said predetermined measurement sequence includes setting a coordinate system
which origin is a center coordinate of said substrate holding member.